DOCUMENT RESUME

ED 310 336 CG 021 912

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TITLE A Retrospective Analysis of Decision Making by Pregnant Adolescents Using Janis and Mann's Decisional Conflict Model.
PUB DATE 24 Mar 89
NOTE 45p.; Paper presented at the Annual Meeting of the Southeastern Psychological Association (35th, Washington, DC, March 22-25, 1989).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Adolescents; *Adoption; Conflict; *Decision Making; *Early Parenthood; Mothers; *Pregnancy
IDENTIFIERS *Decision Conflict Model

ABSTRACT

Research on decision making in pregnant adolescents is in its infancy. Most has focused on correlates of the various pregnancy outcomes such as abortion, delivery, parenting one's child, or relinquishing the child for adoption. There is a need to investigate the process of decision making with pregnant adolescents in light of a theory of decision making, such as Janis and Mann's (1977) decisional conflict model. Adolescent mothers (N=54) with children less than 2 years old completed questionnaires about how they made their decision between parenting and relinquishment. Generally, girls gave high weights to self-approval as a mother and to self-disapproval in the event of relinquishment. They considered their parents' wishes to a lesser degree than their own, but they mostly believed their parents wanted them to keep the child. Mothers and best girlfriends were the most influential people in adolescents' decision making. Girls who considered the decision the most completely were those who experienced the most negative effects of the decision, a situation which is not in line with Janis and Mann's model. Results suggest that efforts to promote decisions for relinquishment among pregnant unmarried adolescents need to concentrate on affecting the perceptions of self-approval of the adolescents in the event of both relinquishment and teenage mothering. (Author/ABL)

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A Retrospective Analysis of Decision Making by Pregnant Adolescents Using Janis and Mann's Decisional Conflict Model

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Paper presented at the meeting of the Southeastern Psychological Association, Washington, D.C., March 24, 1989

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Abstract

There is a need to investigate the process of decision making with pregnant adolescents in light of a theory of decision making, such as Janis and Mann's (1977) decisional conflict model. Adolescent mothers (N = 54) with children less than two years old completed questionnaires about how they made their decision between parenting and relinquishment. Generally, girls gave high weights to self-approval as a mother and to self-disapproval in the event of relinquishment. They considered their parents' wishes to a lesser degree than their own, but they mostly believed their parents wanted them to keep the child. Mothers and best girlfriends were the most influential people in adolescents' decision making. Girls who considered the decision the most completely were those who experienced the most negative effects of the decision, which is not in line with Janis and Mann's model.

A Retrospective Analysis of Decision Making by Pregnant Adolescents Using Janis and Mann's Decisional Conflict Model

Research on decision making in pregnant adolescents is in its infancy. Most research has focused on correlates of the various pregnancy outcomes, be it abortion or delivery or, if the latter is chosen, parenting one's child or relinquishing the child for adoption. Despite the existence of various theories of decision making, little empirical research has related decision making theory to adolescent pregnancy (for exceptions see Bracken et al., 1978; Eisen et al., 1983). Research is needed that examines the process as well as the outcome of decisional making in adolescent pregnancy, especially from a specific theoretical perspective.

Janis and Mann's (1977) theory of decisional conflict is one comprehensive overview of decision making. This model outlines five stages of decision making: (a) appraising the challenge, (b) surveying the alternatives, (c) weighing the alternatives, (d) deliberating about commitment, and (e) adhering to the commitment despite negative feedback. At each of the five stages, the decision maker is faced with basic questions. The answers to these questions determine the

decision making strategy that will be taken. Janis and Mann essentially suggests that vigilant information processing leads to optimal decisions. Vigilant information processing involves the systematic examination of the pros and cons of each viable alternative. The pros and cons are weighed according to mental decisional balance sheets. For a pregnant adolescent trying to decide between rearing or relinquishing her child for adoption, the adolescent would construct four mental balance sheets. Two would consider benefits and costs of rearing; the other two would consider relinquishment. On each balance sheet, the adolescent would consider four areas: (a) utilitarian benefits or costs to herself, (b) utilitarian benefits or costs to others, (c) anticipated social approval and disapproval, and (d) anticipated self-approval and disapproval. Two aspects of decisional balance sheets are important. First, the completeness of the decisional balance sheets for the major alternatives indicates the degree to which vigilant information processing might have occurred. Second, the relative importance of each category of consideration reveals the value structure of the girl.

In emotionally "hot" decisions (ego involving

decisions with real risks of harm and loss), people often use suboptimal decision making strategies. Janis and Mann propose a decision tree that predicts whether people will terminate their decision making at suboptimal levels or will persevere to vigilant information processing.

They suggest that involvement of significant others might impair or assist decision making. Others may attempt to influence decisions. The decision maker might rebuff them, ignore them, or heed their advice. Janis and Mann suggest that the vigilant information processor will be open to information from interpersonal sources and communication media. In fact, the vigilant information processor will generally seek additional information. On the other hand, adolescents who use suboptimal decision making might do so in response to pressure or coercion or they might use the excuse of parental involvement to justify suboptimal decision making.

Finally, Janis and Mann suggest that the type of decision making strategies employed will affect the post-decisional satisfaction with the decision, with vigilant information processing resulting in more satisfaction with decisions and less post-decisional regret. Most likely, vigilant information processors would be expected

to experience fewer problems (e.g., somatic problems, depression, and the like) after the decision than would suboptimal decision makers.

The present study uses a retrospective method to examine unmarried adolescents who ultimately did not choose relinquishment. It examines hypotheses derived from Janis and Mann's theory in (a) the completeness and composition of the decisional balance sheets, (b) the differences between girls who considered both rearing and relinquishment and those who considered only rearing, (c) the perceived attempts at influence and impact of influence by important people in the girls' lives, and (d) the effect of various decision making strategies on post-decisional adjustment (with number of crises subsequent to the birth controlled).

Method

Participants

Participants were 54 unmarried adolescents between the ages of 13 and 19 (mean age = 16.5) at the time of the study, who (a) had delivered a baby within 24 months of the study, and (b) had decided to parent their baby. Participants were chosen from nine public or private agencies in Virginia. Of the 54, 43(80%) were black, 9(17%) were white, and 2 did not report their race. The

agencies were six teen parenting programs, one crisis pregnancy center, and two OB/GYN clinics in health departments. Multivariate analyses of variance showed no differences in decision making across agencies contributing more than 6 participants.

Questionnaire

The questionnaire measured decision making according to the Janis and Mann's conflict model of decision making.[1] It was self-developed and non-validated. It consisted of 50 questions (16 pages) regarding decision making during pregnancy and post-decisional adjustment. The format included both Likert-type and multiple choice questions. For example, items concerned with the decisional balance sheets were grouped under headings such as "Positive Things About Keeping the Baby." A stem -- "If I kept my baby ..." -- was followed by statements such as "...I could stay at home with my baby," which was rated in importance from 1 (not important) to 5 (extremely important). Items concerned with interpersonal influence required the adolescent to circle type of influence (adopt, keep, give to relative) and to

[1]A copy is available from the second author on request. (A copy is included for editorial review.)

rate amount of attempted and actual influence (1 = not at all to 5 = very strongly). Items concerning post-decisional effects had adolescents circle those that applied from a list of seven somatic problems and rate degree of depression (1=never to 5=always) and stress (1=no stress to 5=severe stress).

Procedure

Procedures for the contact and selection of participants for this study differed in minor ways according to administrative policies of the agencies. All participants met the criteria outlined earlier in this paper. The teenagers, with the exception of those from one agency, were paid $5.00 for their participation in the study. The exception was due to the administrative policy of this agency, which did not allow their clients to be paid for participation in research. Participants were recruited by members of their agency. Completed questionnaires were mailed to the researcher.

Results

Completeness and Content of Decisional Balance Sheets

Hypothesis 1. It was hypothesized that the degree of completeness of a girl's decisional balance sheet, in terms of her consideration of the negative aspects of

keeping the baby as well as the positive aspects of relinquishment, could be significantly predicted, once her initial reaction to being pregnant was controlled, by the number of people she consulted in regard to her decision and number of sources of information she consulted regarding adoption during decision making. A hierarchical multiple regression analysis was conducted to test this hypothesis. The squared multiple regression coefficient ($\underline{R}^2$), the incremental $\underline{R}^2$ ($\underline{R^2 inc}$), and semipartial correlations for each step are given in Table 1.

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Insert Table 1 about here

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The R^2 at the first step, to control for the girl's initial reaction to her pregnancy, was .13, $\underline{F}(1,52) = 7.70$, $\underline{p} < .01$. the semi-partial correlation for this variable was .36, $\underline{p} < .01$. This indicates that the girl's initial reaction contributes a significant portion of the variance of the completeness of the girl's decisional balance sheet.

The incremental R^2 for step 2 was .01, $\underline{F}$ (2,51) < 1, ns. The number of people the girl consulted in her decision making did not significantly contribute to the

completeness of her decisional balance sheet. The incremental R^2 for step 3 was also .01, $F(3,50) < 1$, ns. The amount of information the girl sought out in regard to adoption was not a significant predictor of how complete her decisional balance sheet would be. In this model, 13% of the variance of the completeness of the decisional balance sheet was accounted for by the girl's initial reaction to being pregnant. Written decisional balance sheets were used to assess retrospectively how alternatives were weighed. For each decisional balance sheet, the girls evaluated how important each item was in their decision making (1 = not important to 5 = extremely important). Each item was later categorized into one of four areas: (a) the utilitarian costs or benefits for the girl, (b) the utilitarian costs or benefits for others, (c) social approval or disapproval, and (d) self-approval or disapproval. The rated importance of each item was summed and divided by the number of items in that area (see Table 2), yielding a weighted mean for that area. In some subsequent analyses, the net benefits of keeping the baby were computed by subtracting mean costs from mean benefits (see Tables 3 and 4).

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Insert Tables 2 and 3 about here

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Hypothesis 2. Of primary importance, in Janis and Mann's model of decision making, is how the girls arrived at their decision to keep their babies. The decisional balance sheets allowed an analysis of the importance the girls gave to various elements in the decision making. As a self-evident example, we would hypothesize that the positive aspects of keeping the baby would outweigh the negative aspects since all girls ultimately decided to keep the baby. The weighted means for the two aspects of the decisional balance sheet for keeping the baby are listed in Table 2. It was also necessary to determine which of the four positive areas was valued most highly. Specifically, it was hypothesized that the girls would give more weight to the benefits in self-approval for keeping than to the other areas under the decisional balance sheet for the positive aspects of keeping the baby (i.e., utilitarian benefits to self, utilitarian benefits to others, or social approval). Further, it was necessary to determine which of the four negative areas was considered to be most important. Specifically, it was hypothesized that the girls would weigh the

utilitarian cost to self to be more important than other areas.

To test these hypotheses, a 2x4(S) ANOVA was performed, using positive aspects of keeping and negative aspects of keeping as a between subjects measure and each of the four areas as a within subjects variable. The number of girls who filled out the decisional balance sheet for the positive aspects of keeping were 54 and for the negative aspects of keeping 44. The dependent variable was weighted importance of items in each category. Pillai's trace was used to approximate the F ratio in this and all other multivariate analyses. There was a significant main effect for aspect, $F(1, 102) = 25.74$, $p < .001$ with positive reasons for keeping the child ($M = 2.13$, $SD = 1.53$) being given more importance in the decision making than were negative reasons ($M = 1.07$, $SD = 1.18$), which supported the self-evident hypothesis. There was also a main effect for area of the decisional balance sheet, $F(3,94) = 20.16$, $p < .001$. Self-approval or disapproval ($M = 2.37$, $SD = 1.57$) was given more weight by the girls than were utilitarian benefits or costs for the girl ($M = 1.59$, $SD = 1.25$), utilitarian benefits or costs for others ($M = 1.42$, $SD = 1.50$) and social approval or disapproval ($M = 1.24$, SD

= 1.34). Finally, there was a significant interaction between positive and negative aspects of keeping and area of the decisional balance sheet, $F(3,104) = 14.65$, $p < .001$.

To determine the nature of the interaction, univariate analyses were conducted to examine simple main effects. The Duncan's multiple range test revealed within area differences. Under positive aspects of keeping, as hypothesized, self-approval was given significantly greater weight than were the other three areas. There were no differences in the weight given to the other three areas. Under the negative aspects of keeping, the utilitarian costs for self and costs in self-approval were given significantly greater weight than were the utilitarian costs for others or the costs in social approval.

Hypothesis 3. A similar analysis of the decisional balance sheets for the positive and negative aspects of relinquishment was conducted (see Table 2 for weighted means). The self-evident hypothesis was that the negative aspects of relinquishment would outweigh the positive aspects since all girls ultimately decided not to relinquish the baby. Only 18 girls filled out the decisional balance sheet for positive areas of

relinquishment and 23 for the negative aspects of relinquishment. It was also necessary to determine which of the four positive areas was valued most highly. Specifically, it was hypothesized that the girls would give more weight to the utilitarian benefits for self for relinquishment than the other areas under the decisional balance sheet for the positive aspects of relinquishment. Further, it was hypothesized that the girls would give more weight to self-disapproval than other negative aspects.

To test these hypotheses, a second 2 x 4(S) ANOVA was performed using positive and negative aspects of relinquishment as the between subjects measure and each of the four areas as the within subjects variable. The dependent variable was weighted importance of items in each category. Negative aspects of relinquishment (M = 2.68, SD = 1.76) were weighed more heavily in the decision making than were positive aspects of relinquishment (M = 1.67, SD = 1.61), $F(1,39) = 7.04$, $p < .01$, supporting the self-evident hypothesis. There was an overall effect for area of the decisional balance sheet, $F(3,37) = 13.31$, $p < .001$. Self-approval or disapproval (M = 3.29, SD = 1.88) was given more importance than utilitarian benefits or costs for self

(M = 1.86, SD = 1.50), utilitarian benefits or costs or others (M = 2.19, SD = 1.57), or social approval (M = 1.61, SD = 1.65). There was also a significant effect for the interaction between positive and negative aspects of keeping and area of the decisional balance sheet, F (3,37) = 16.21, $p < .001$.

To determine the nature of the interaction, univariate analyses were conducted to examine simple main effects. Duncan's multiple range test revealed that, for positive aspects of relinquishment, the utilitarian benefits to self were given greater weight than were the utilitarian benefits to others or benefits in social approval but not more weight than the benefits in self-approval. For negative aspects of relinquishment, costs in self-approval were given greater weight than were the utilitarian costs for self, utilitarian costs for others or costs in social approval. The utilitarian costs for others was given more weight than utilitarian costs for self or costs in social approval.

Comparison of Girls Who Did and Did Not Consider Adoption

According to Janis and Mann's theory, girls who did not even consider relinquishment for adoption likely used some suboptimal decision making strategy. In the present sample, all girls decided to parent the baby. However,

26% (n = 14) considered relinquishment or allowing a relative to raise the baby as a serious option. Of those remaining, 72% (n = 39) reported never considering relinquishment as a serious option. One girl's data were missing.

Hypothesis 4. It was hypothesized that girls who seriously considered adoption, either formal or informal, would differ in their decision making from those who did not seriously consider adoption. Means and standard deviations are reported in Table 3.

A one-way MANOVA was used to analyze differences between girls who did and did not consider adoption. The dependent variables were: (a) initial reaction to pregnancy (from 1 to 5 with 1 = very happy and 5 = very upset), (b) length of time to making the decision (from 1 to 9 with 1 = as soon as I knew I was pregnant and 9 = after I left the hospital), (c) difficulty in making a decision (from 1 to 5 with 1 = very easy and 5 = very hard), (d) amount of pressure they felt to make a decision (from 1 to 5 with 1 = no pressure and 5 = extreme pressure) and number of times they changed their minds about the decision (from 0 to 4 with 0 = none and 4 = 4 or more). There was an overall multivariate effect, multivariate $F(5, 47) = 7.37$, $p < .001$.

Univariate analyses were conducted to determine the locus of differences. As hypothesized, girls who seriously considered adoption reported being more initially upset with being pregnant, $F(1,52) = 16.16$, $p < .001$, took longer to make their decision, $F(1,52) = 10.68$, $p < .01$, experienced more difficulty deciding, $F(1,52) = 20.28$, $p < .001$, and changed their minds more about their decision, $F(1,52) = 21.70$, $p < .001$, than did girls who did not consider adoption. The hypothesis was supported.

Hypothesis 5. It was hypothesized that girls who did and did not seriously consider adoption would differ on how they viewed the net benefits for keeping the baby and for relinquishing the baby. To analyze the difference between the decisional balance sheets for keeping of girls who considered both alternatives ($n = 14$) and girls who only considered keeping their babies ($n = 39$) (see first two columns of Table 4),a one-way MANOVA was performed using net utilitarian benefits for self, net utilitarian benefits for others, net social approval and net self-approval as the dependent variables. There was no overall multivariate effect for whether adoption was or was not considered on the net benefits perceived for keeping the baby, multivariate

$F(4,48) < 1$, ns. Thus, hypothesis 5 was not supported; all girls considered keeping the baby to be positive--whether or not they had seriously considered relinquishing the baby for adoption.

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Insert Table 4 about here

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Hypothesis 6. It was hypothesized that girls who considered adoption would view the net benefits of relinquishment to be greater than girls who didn't consider adoption. Similar to the previous analysis, a one-way MANOVA was performed on the decisional balance sheets for relinquishment, both formal or informal, for girls who did and did not consider that alternative. Only 12 girls who considered adoption and 11 girls who didn't consider adoption filled out these decisional balance sheets and could be analyzed (see the last two columns of Table 4). There was no overall multivariate effect for considering adoption on the net benefits of relinquishment, multivariate $F(4, 18) = 1.10$, ns. Thus, hypothesis 6 was also not supported; regardless of whether or not girls seriously considered relinquishing the baby for adoption, they evaluated that alternative similarly.

Involvement of Others in Decision Making

Hypothesis 7. It was hypothesized that there would be differences in the degree to which other people attempted to influence the girl's decision. Specifically, it was hypothesized that other people attempted to influence girls who seriously considered adoption more strongly than they did girls who did not consider adoption.

To test this hypothesis, a 2 x 7(S) (girls who did and did not consider adoption x influencer) ANOVA was performed using the rating of the attempted influence as the dependent variable (1 = not at all to 5 = very strongly). See Table 5 for a summary of the means and standard deviations for the girls ratings of others' attempts to influence her and perceived actual influence. Contrary to the hypothesis, there was no main effect for considering adoption, $F(1, 52) < 1$, ns. However, there was a significant main effect for influencer, $F(6, 370) = 4.42$, $p < .001$. There was no significant interaction, $F(6, 370) = 1.99$, ns. Duncan's multiple range test was used to distinguish which influencers attempted more influence. The girl's mother and best girlfriend attempted to influence her more strongly than did the baby's father, sibling(s), other relative(s), girl's

father or a counselor. The baby's father, siblings, other relatives, and the girl's father attempted more influence than did a counselor. Generally, the girl's father, the baby's father, sibling(s), other relatives and a counselor attempted less influence than the girl's mother, and her best girlfriend.

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Insert Table 5 about here

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Hypothesis 8. In contrast to hypothesis 7, which investigated perceived attempts at influence, hypothesis 8 investigated the girl's perception of actual influence. It was hypothesized that other people would be perceived to have more influence on girls who considered adoption than they would on girls who did not consider adoption and that there would be differences among other people on how strongly they were perceived to have influenced the girl.

To test this hypothesis a second 2 x 7(S) (girls who did and did not consider adoption x influencer) ANOVA was performed using the rating of the perceived influence as the dependent variable (see Table 5). Contrary to the hypothesis, there was no main effect for considering adoption, $F(1, 52) = 1.53$, ns. There was a significant

main effect for influencer, $F(6, 368) = 4.78$, $p < .001$, but there was no interaction effect $F(6,368) = 1.69$, ns. A Duncan's multiple range test revealed that there were no differences in the perceived influence of the girl's mother, baby's father, or best girlfriend. Counselors were the least influential of all the others.

Post-decisional Effects of Different Decision Making Strategies

Janis and Mann predict that vigilant decision making should be expected to be related to post-decisional satisfaction with the decision. Decision making strategies were identified on the basis of the girls' reports of whether they (a) were happy with the pregnancy, (b) gathered any information about adoption, (c) made an immediate decision to rear the child, (d) felt pressure to decide, and (e) considered benefits of adoption. Originally, we classified decision making strategies into five types, but for analyses, we made the more important theoretical distinction between those girls who did not use some vigilant information processing (e.g., unconflicted adherence, satisfying, and defensive avoidance) and those girls who did (e.g., vigilant information processing and mixed defensive avoidance and vigilant processing).

Insert Table 6 about here

Hypothesis 9. According to Janis and Mann's model, the type of decision making strategy is expected to have an impact upon post-decisional satisfaction. It was hypothesized that girls who used vigilant information processing strategies would report greater post-decisional satisfaction with their decision than girls who did not. A one-way analysis of covariance (ANCOVA) was used to analyze the different decision making strategies, after statistically controlling the number of life crises since the child's birth. The dependent variable was post-decisional satisfaction, rated from 1 = extremely satisfied to 5 = extremely dissatisfied. Girls using decision making strategies involving vigilant information processing did not have greater post-decisional satisfaction (M = 3.32) than did girls who did not use vigilant information processing (M = 3.69), $F(1, 51) < 1$, ns. The covariate (number of crises) was also not significant, $F(1, 51) = 1.42$, ns.

Hypothesis 10. It was hypothesized that girls using less optimal decision making strategies would experience more somatic problems, more frequent depression and less

life satisfaction than did girls who used vigilant information processing, assuming that life crises since the baby's birth were controlled. A one-way MANCOVA was performed on the different decision making strategies. The covariate was the number of family crises that the girl experienced since the time of the baby's birth. The dependent variables (see Table 6) were (a) somatic problems experienced since the baby's birth (the number was summed), (b) frequency of depression since the baby's birth (rated on a scale of 1 to 5 with 1 = never depressed and 5 = always depressed), and (c) life satisfaction (rated from 1 = extremely satisfied 5 = extremely dissatisfied). There was no overall significant effect for the covariate (crises), multivariate $F(3, 48) < 1$, ns. As hypothesized, however, there was a significant multivariate effect for type of decision making strategy used, multivariate $F(3, 48) = 3.20$, $p < .04$. To determine the locus of the effect, univariate ANOVAs were performed. Girls who reported using vigilant decision making strategies reported more somatic complaints than did girls who did not report using vigilant information processing, $F(1, 50) = 2.76$, $p < .01$. Girls using or not using vigilant information strategies reported no differences in depression ($p <$

.10) and in life satisfaction ($p < .10$), when adjusted for the presence of other crises since the birth of the child.

Discussion

Limitations

In interpreting the results of the present study, a caveat is in order. We examined retrospective accounts of how unmarried adolescents who had recently had a child reported making their decisions. Such accounts may have been influenced by (a) outcomes of the decisions, (b) girls' evaluations of the outcomes, (c) present circumstances, and (d) maturation during the time between the decision making and the time of measurement. However all methodologies for investigating decision making have difficulties. Measurement that is concurrent with the decision making suffers from potential reactivity in which the questioning about decision making might change the adolescent's decision making. Prospective designs are almost prohibitive in terms of numbers; further, the time between the prospective measurement of decision making and the occurrence of the pregnancy differs for each girl, making the predictive validity of the initial test of decision making suspect. Despite the weaknesses of retrospective studies, this methodology was adequate

to derive initial ideas about pregnant adolescents' decision making.

Decisional Balance Sheet

Generally, the girl's initial reaction to pregnancy was the strongest determinant of how complete her decisional balance sheet was likely to be. This was more important than whether she sought information from other people or from media sources. This suggests that many of these adolescent girls had already thought about keeping a baby should it be conceived outside of wedlock. This was supported by the finding that whether the girls actively consulted others or media sources, they generally had equally complete decisional balance sheets.

The main finding of the study is that adolescents weighed their self-approval for deciding to keep the child as being more important than either social approval or than utilitarian considerations for themselves or others. In considering the costs of keeping the child, adolescents considered both costs to themselves in utilitarian terms and in terms of self-disapproval to be more important than costs to others. Their thinking about relinquishment was somewhat different. The benefits of relinquishment to the self (utilitarian or self-approval) were more important than were benefits to

others (utilitarian or social approval). Costs of relinquishment were primarily self-disapproval if the girl relinquished the child for adoption. Relinquishment was also seen as being costly to others, which is in line with research showing that adolescents' parents often do not want to give up a grandchild to adoption (see Leynes, 1980; Michaels & Fanelli, 1986; Rosen, 1980; Young, Berkman, & Rehr, 1975).

The girls' emphasis on themselves was evidence of egocentric decision making, as suggested by Elkind (1967). However, most adolescents also considered the meaning of each alternative to their relationship with their baby and with their parents, too, which supported Gilligan's (1982) thesis that women differ from men in how they make moral decisions. Adolescents considered their relationships in their rearing-relinquishment decision making. Gilligan proposed that women develop moral decision making skills in three stages: (a) care for their own survival needs, (b) care for others self-sacrificially without care for themselves, and (c) care for both the self and others. On the other hand, the strong consideration of relationship factors in these decisions may have more to do with the type of decision required (which of necessity forced the adolescent to

consider relationships) than it has to do with male-female differences as Gilligan suggests.

Girls Who Did and Did Not Consider Relinquishment

Only about one-fourth of the girls said they seriously considered adoption. Girls who seriously considered adoption were more upset with their pregnancy initially, took longer to decide, reported the decision as being more difficult, felt more pressure to decide, and changed their minds more often than did those who did not seriously consider adoption. Despite these differences, the patterns of net benefits and costs on the decisional balance sheets of the girls who seriously considered adoption did not differ substantially from those who did not consider it. They all generally saw rearing as beneficial and relinquishing as costly, especially in terms of their self-approval. In this analysis, we analyzed net benefits and costs in each category. It is possible that girls who seriously considered adoption actually considered more benefits and more costs than did girls who did not seriously consider adoption, but the subtraction of the two resulted in the same pattern for both sets of girls. Generally, both sets of girls reasoned similarly, weighing self-approval and disapproval as the primary motive in their decisions.

Influence of Others

A large literature has been amassed concerning influence during decisions about relinquishment and rearing. Our findings are generally in line with the bulk of that research, but there are a few important differences. For example, in our sample, mothers and best girlfriends were reported to have made the strongest attempts to influence the girls' decisions and to exert the most actual influence. This is congruent with the findings of Young, Berkman, and Rehr (1975), Clapp and Raab (1978), Grow (1979) and Resnick (1984). Rosen (1980) also found high involvement of the girl's mother once a girl decided to bear the baby to term. Further, the girl's father has generally been found to have little influence unless the mother has strong influence and the father agrees with her. In our sample, fathers were perceived as both attempting and having little influence.

In past research, the baby's father has been found to exert substantial influence, especially if the relationship between the adolescent and the baby's father was a continuing relationship (see Gabbard & Wolff, 1977; Grow, 1979; Michaels, 1984; Michaels & Brown, 1982; Michaels & Fanelli, 1986; Musick et al., 1984; Resnick, 1987; Rosen & Benson, 1982). In our sample, the baby's

father was perceived as making only mild attempts at influence and achieving only a moderate amount of influence. In our sample, participants were unmarried adolescents, often measured over a year from the discovery of the pregnancy. It is assumed that many of the relationships between the adolescent and the baby's father had ceased; those relationships that eventuated in marriage were excluded from our sample.

Most surprising in our findings, a sibling of the adolescent was found to have moderate influence and another relative besides the girl's mother, father or sibling was found to have substantial influence. This might be in line with the findings of Resnick (1987) who found that other relatives who had faced a similar unwanted pregnancy were often powerful role models for pregnant adolescents deciding between relinquishment and rearing. Further, 80 percent of the adolescents in our sample were black, and the grandmother may play a role in decision making in such families (see Burton & Bengtson, 1985). Counselors were generally perceived to attempt and achieve little influence, which is consistent with Marecek's (1987) review.

Benefits of Vigilant Information Processing

Most damaging to Janis and Mann's theory was our

finding that vigilant information processing was not associated with better post-decisional adjustment than non-vigilant information processing strategies. In fact, vigilant information processing strategies were associated with impaired adjustment. In our study, the girls who engaged in vigilant information processing were generally those who were the most undecided throughout their pregnancies. The uncertainty over their decision may have motivated them to be vigilant in considering alternatives. In much research supporting Janis and Mann's work, the decisions are emotionally "cool," involving few real consequences for participants. In such instances, it is expected that vigilant information processing is associated with post-decisional adjustment. In our case, though, the indecision apparently did not end at the time of birth. The conditions that might have contributed to initial indecision likely persisted after the birth of the child, causing continuing doubts and struggles. Also, girls who chose defensive avoidance strategies may have continued to bolster the decision after the time of measurement, denying any negative effects.

Summary

This study evaluated retrospective accounts of

decision making processes of pregnant adolescents. Despite the caution with which the results must be interpreted, the research suggests that efforts to promote decisions for relinquishment among pregnant unmarried adolescents need to concentrate on affecting the perceptions of self-approval of the adolescents in the event of both relinquishment and teenage mothering.

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Table 1

Hierarchical Regression Analysis of Degree of Completeness of the Decisional Balance Sheets[a]

Variable	Semi-Partial	R^2	R^2 inc
Set A		.13**	.13**
Initial Reaction[b]	.36**		
Set B		.14*	.01
People Consulted About Adoption	.09		
Set C		.15*	.01
Sources of Information Consulted About Adoption[c]	.11		

Note. N = 54

[a] The degree of completeness of the decisional balance sheet determined by the sum of the number of items circled that were rated 2 points or more (1=not important at all to 5=extremely important to my decision) under the negative aspects of keeping and positive aspects of adoption.

[b] The girl's initial reaction to being pregnant was rated on a scale from 1 = very happy and 5 = very upset.

[c] The number of sources of information consulted regarding adoption (i.e., read books or magazines on adoption, saw film or movie on adoption, talked with other

girl(s) who had relinquished a baby or talked with counselor or personnel from adoption agency) were summed.

* $p < .05$

** $p < .01$

Table 2

Weighted Mean Importance to Adolescent's Decision of Each Area of the Decisional Balance Sheets for Keeping and Relinquishing the Baby

	Keeping		Relinquishing	
Area	Benefits[a]	Costs[b]	Benefits[c]	Costs[d]
Utilitarian Benefits or Costs For Self	1.65 (4)	1.52 (10)	2.26 (10)	1.54 (5)
Utilitarian Benefits or Costs for Other	1.93 (4)	.78 (7)	1.33 (7)	2.87 (7)
Social Approval	1.71 (6)	.66 (6)	1.17 (6)	1.96 (7)
Self-approval	3.22 (6)	1.30 (6)	1.93 (4)	4.35 (6)

Note. Weighted means were calculated by summing the important of each item (1=not important to 5=extremely important) within an area (e.g., utilitarian benefits for self) and dividing by the number of items in that area, which is listed in parentheses beneath each mean. For each category, n is different because many adolescents did not complete decisional balance sheets in all areas, especially for relinquishment.

[a] n = 54

[b] n = 44

[c] n = 18

[d] n = 23

Table 3

Comparison of Difficulty in Decision Making for Adolescents Who Did and Did Not Seriously Consider Adoption

		Considered Adoption (n = 14)	Did Not Consider Adoption (n = 39)	Univariate $F(1, 52)$
Initial Reaction[a]	M	3.93	2.56	16.16**
	SD	.92	1.42	
Length of Time to Decide[b]	M	4.29	2.23	10.68*
	SD	2.49	1.83	
Difficulty of Decision[c]	M	3.43	2.10	13.78**
	SD	.76	1.25	
Pressure to Decide[d]	M	3.79	2.21	20.28**
	SD	1.18	1.10	
Times Changed Mind[e]	M	2.21	.51	21.70**
	SD	1.31	1.12	

Note. N = 53 due to one girl's missing data. Multivariate $F(5, 47) = 7.37$, $p < .001$.

[a] Initial reaction (to pregnancy) rated from 1 = very happy to 5 = very upset.

[b] Length of time to decide rated from 1 = as soon as I knew I was pregnant to 9 = after I left the hospital.

[c] Difficulty in deciding was rated from 1 = very easy to 5 = very hard.

[d] Pressure in deciding was rated from 1 = no pressure to 5 = extreme pressure.

[e] Times changed mind (about the decision) rated from 0 = none to4 = 4 or more.

* $p < .01$

** $p < .001$

Table 4

Comparison of Decisional Balance Sheets for Girls Who Did and Did Not Seriously Consider Adoption

		Keeping		Relinquishing	
		Did Consider (N=14)	Did Not Consider (N=39)	Did Consider (N=12)	Did Not Consider (N=11)
Net Utilitarian Benefits for Self	M	.31	.51	5.00	2.49
	SD	1.31	.95	3.67	3.27
Net Utilitarian Benefits for Others	M	1.17	1.38	-.27	-1.90
	SD	1.71	1.60	2.41	2.34
Net Social Approval	M	1.08	1.24	-.29	-1.85
	SD	1.37	1.46	1.62	2.25
Net Self-Approval	M	1.79	2.32	-2.90	-3.82
	SD	1.85	1.26	1.76	1.57

Note. ns differ because different numbers of girls completed different sections of the decisional balance sheet. For instance, 53 of 54 girls completed the decisional balance sheet concerning keeping the baby, but only 23 girls completed items concerning relinquishing the baby. In all cases, net benefits were calculated by subtracting mean costs from mean benefits; thus, a negative number

is one in which costs outweigh benefits.

Table 5

Perceived Attempted and Actual Influence for Girsl Who Did and Did Not Consider Adoption

		Attempted Influence		Actual Influence	
			Did Not		Did Not
		Considered	Consider	Considered	Consider
		(n = 13)	(n = 39)	(N = 13)	(N = 39)
Mother[a,d]	M	3.85	3.53	3.93	3.54
	SD	1.79	1.88	1.54	1.75
Best	M	3.78	3.44	3.69	3.30
Girlfriend[a,d,e]	SD	1.85	1.99	1.80	2.04
Baby's Father[b,e,f]	M	2.64	2.95	2.54	3.10
	SD	2.16	2.19	2.03	2.04
Sibling[b,e,f]	M	1.03	3.03	2.71	2.92
	SD	2.27	2.10	2.20	2.13
Other	M	2.28	2.49	3.71	2.46
Relative[b,e,f]	SD	2.20	2.28	1.89	2.23
Girl's	M	1.86	2.64	1.86	2.46
Father[b,f]	SD	2.32	2.13	2.14	1.99
Counselor[c,g,]	M	3.21	1.51	2.93	1.51
	SD	2.08	1.97	1.90	1.96

Note. N = 53 due to missing data for one girl. Strength of the attempt to influence the girl's decision was rated on a scale of 1 to 5 with 1 = not at

all and 5 = very strongly.

[a,b,c] Influencers with different superscripts differed at $p < .05$.

[d,e,f,g] Influences with different superscripts differ at $p < .05$ on perceived actual influence.

Table 6

Comparison of Girls Who Did and Did Not Use Vigilant Information Processing on Post-decisional Outcomes

		Amount of Vigilant Information Processing	
		Some (n = 23)	None (n = 31)
Family Crises Since Baby's Birth[a]	M	.43	.51
	SD	.79	1.26
Post-decisional Satisfaction[a]	M	2.30	2.64
	SD	3.32	2.04
Measures of Life Stress			
Somatic Problems	M	1.83	.67
	SD	1.77	1.11
Depression	M	2.78	2.29
	SD	1.04	.97
Life Satisfaction	M	1.91	1.51
	SD	1.06	.62

[a]Those people who used some vigilant information processing strategies did not differ from those who did not on univariate analyses.